Rhode Island Department of Health

Cancer Control Program

Cancer Control among Rhode Island's Minorities

John P. Fulton, PhD
Published in: "Health by Numbers," *Rhode Island Medicine*, 1996;79(7)
Health by Numbers is edited by Jay S. Buechner, PhD, and William J. Waters, Jr., PhD.
Dr. Fulton is Assistant Director, Division of Disease Prevention and Control, and Clinical Assistant Professor, Department of Community Health, Brown University School of Medicine.

Introduction

Rhode Island residents who are members of minority racial and ethnic groups often suffer from poor health status relative to the white, non-Hispanic population. In order to examine the differentials with respect to cancer, the Rhode Island Department of Health assessed data on cancer incidence, cancer mortality, and selected behavioral risk factors for cancer among the major racial and ethnic groups in the state's population.

Methods

Frequencies of newly diagnosed cancers by race and ethnicity were obtained from the Rhode Island Cancer Registry for the year 1993. Cancer mortality rates were calculated from state vital records for the period 1980 - 1989 and United States Census data for 1980 and 1990. Rates were age-standardized using the 1970 population of the United States as the standard population. Tobacco use statistics were obtained from the United States Current Population Survey conducted in September 1992, January 1993, and May 1993.[1] Cancer screening data for minority women were obtained from a 1991 survey of Rhode Island women ages 40 and older residing in minority low-income census tracts. (The selected census tracts were those in the lowest quartile of a group of socioeconomic indicators and in which at least five percent of the population was Hispanic or non-Hispanic African American in the 1990 Census.) Statewide data were obtained from the Rhode Island Behavioral Risk Factor Surveillance System surveys for 1991 and 1993. Screening standards used were based on national recommendations and were as follows:

Breast cancer:

• Women ages 40-49: Mammogram in past two years and clinical breast examination in past year

• Women ages 50+: Mammogram in past year and clinical breast examination in past year

Cervical cancer:

• Women ages 40+: Pap test in past year

[Note: Even when aggregated over several years, Rhode Island public health statistics for minority groups are usually based on few cases, e.g., few cases of cancer, few cancer deaths, and few survey respondents. Statistics based on few

cases are usually associated with large standard errors and should be interpreted with due caution.]

Results

Of 5,486 newly diagnosed cases of cancer among Rhode Island residents in 1993, 5,172 (94.3 percent) occurred among non-Hispanic whites, 143 (2.6 percent) among non-Hispanic African Americans, 38 (0.7 percent) among Hispanics, and less than 1 percent among Asians (15), Native Americans (4), and Asian Indians (2) combined. For 112 cases (2.0 percent) race and ethnicity were not reported.

African Americans in Rhode Island, both males and females, were substantially more likely than whites to die of lung cancer during 1980 - 1989, with elevations of 34 percent among males and 44 percent among females. (Tables 1 and 2) In addition, African American men were over twice as likely as white men to die of prostate cancer. Mortality rates for cancer of the colon and rectum, female breast, and uterine cervix did not differ significantly between African Americans and whites.

Table 1. Age-adjusted* cancer mortality per 100,000 population, males, by race, for cancers of selected anatomical sites, Rhode Island, 1980 - 1989

Anatomical Site	White	African American
Lung and bronchus	76	102
Colon and rectum	33	29
Prostate	23	60

* Age-adjusted using the 1970 population of the United States as the standard

Table 2. Age-adjusted* cancer mortality per 100,000 population, females, by race, for cancers of selected anatomical sites, Rhode Island, 1980 - 1989

Anatomical Site	White	African American
Lung and bronchus	27	39
Colon and rectum	21	25
Breast	31	32
Cervix	3	2

* Age-adjusted using the 1970 population of the United States as the standard

Smoking prevalence in the population ages 20 and older during 1992 - 1993 was highest among African American males and lowest among Hispanic males (Table 3). African American men are about twice as likely to smoke as other men. Non-Hispanic African American women and Hispanic women had about the same smoking prevalence, somewhat lower than the smoking prevalence among non-Hispanic white women.

Table 3. Prevalence of cigarette smoking among persons ages 20 and older, by race, Hispanic origin, and gender, Rhode Island, 1992 - 1993

Race and Ethnicity	Males	Females
All races and ethnicities	23	24

Hispanic	14	21
White, not Hispanic	23	25
African Am, not Hispanic	44	20

Screening for cancers of the breast and cervix was performed less frequently among inner-city women than among women statewide in 1991. (Table 4) Inner-city Hispanic women were half as likely as other inner-city women to have been screened for cancers of the breast and cervix according to current guidelines.

Table 4. Compliance with screening standards for breast cancer and cervical cancer among women ages 40 and older, by location of residence, Hispanic origin, and race, Rhode Island, 1991

	Percent Screened According to Guidelines	
Race and Ethnicity	**... for Breast Cancer**	**... for Cervical Cancer**
Statewide All races and ethnicities	76	58
Inner-city Hispanic	20	39
Inner-city White, not Hispanic	38	45
Inner-city African Am, not Hispanic	35	49

Discussion

Although persons of Hispanic origin form the state's largest minority group based on race and ethnicity, there are far fewer cases of cancer diagnosed annually among Hispanics than among African Americans, the second largest minority group. This occurs in part because the incidence rates of most forms of cancer increase with age and there are fewer elderly among the state's Hispanic residents (4.5 percent were ages 65 and older in 1990) than among the state's African American residents (5.7 percent were ages 65 and older in 1990). However, much of the disparity is likely due to the under-reporting of Hispanic origin that is believed to exist in many of the state's health data sources.

Tobacco use is a major cause of cancer in Rhode Island. African American men, among whom the prevalence of tobacco use is high, experience high mortality from lung cancer, which is largely caused by cigarette smoking. Engaging the state's minority communities in tobacco control efforts is a special focus of the Department's "American Stop Smoking Intervention Study" (ASSIST).

Prostate cancer mortality is much higher among African American men than among white men in Rhode Island. This phenomenon, observed throughout the United States, is attributable to higher prostate cancer incidence and poorer access to health care among African Americans. Although the effectiveness of

mass screening for cancer of the prostate is controversial, most medical authorities recommend regular use of the digital rectal examination as part of the periodic preventive health exam for men ages 40 and older. The American Cancer Society recommends annual use. Although no data exist to measure precise screening rates among African American men, Behavioral Risk Factor Surveillance System data for 1993 show that the screening rate for all men ages 40 and older was only 51 percent annually. It would be prudent to increase use of the digital rectal examination among African American men by increasing their access to primary care and by promoting use of the periodic preventive health exam.

Screening rates for cancers of the breast and cervix are too low among minority women in Rhode Island's inner-city areas, especially among Hispanic women, and will result in excess cancer mortality unless improved. In order to avoid this outcome, minority women have been a special focus of recent efforts to improve women's cancer screening rates in the state.

References

1. Hartman AM. Tobacco use in Rhode Island (tables). United States Current Population Survey, Tobacco Use Supplement, Sept 1992, Jan 1993, and May 1993. Bethesda, Maryland: National Cancer Institute, 5 Oct 1994.